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Title: MATERIAL FROM "TOPOGRAPHICAL SURVEY OF THAILAND"

Source: Topographical Survey of Thailand by Japanese 39th Army.

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MATERIAL FROM "TOPOGRAPHICAL SURVEY OF THAILAND"

Published 1 January 1945 by the Yoshi Butai Headquarters

[Headquarters of the Japanese Thirty-ninth
Army located at Bangkok]

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INSERT MAP NO 1-A

CANALS CENTERED AROUND BANGKOK

MAP 1-A: General Map of Waterways Centered Around Bangkok

SCALE: $\frac{1}{1,000,000}$

FINDINGS: 1. Canals which are approximately 5 meters wide are spaced from 500 to 1000 meters apart, and those approximately 10 to 20 meters wide are spaced from 1000 to 2000 meters apart.

2. Large canals will permit passage motor-boats.

NOTE: Aside from those indicated on this map there are innumerable canals running in all directions, particularly in the Bangsit region.

1. Mae Nam Chao Phraya
2. Ayutthaya
3. Hok Wa Sai Bon Canal
4. Bangsit
5. Bangsit Canal
6. Canal Number 21
7. Sheenreebu Canal (シーンレーブ)
8. Buren Waterway (ブレン)
9. Mae Nam Bang Pakong
10. Chachoeng-sao

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11. Prawet Buri Canal
12. Samrong Canal
13. Paknam
14. Bangkok
15. Kureepurasakon (クレープ"プラサコン)
16. Tachin River
17. Naraphir^om Canal
18. Maha Sawat Canal
19. Phasi Charoen Canal
20. Maha Chal Canal
21. Samut Sakon
22. Damnoen Saduak Canal
23. Nakhon Pathom
24. Meklong River
25. Samut Songkhram

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1. Mae Nam Chao Phraya
Lowtide, maximum fall 10.9 meters
Hightide, maximum rise 4-5 meters
Sludge
2. Tachin River
Sludge
3. Meklong River
Sludge
- 3-a. Meklong
 4. Eastern Line
 5. Nakhon Chai Si River
 6. Bangkok
 7. To: Singapore
 8. To: Chiangmai
 9. Bang Su
 10. Ban Tuan
 11. Rama VI Bridge
 12. Samsen
 13. Makasan
 14. To: Phnompenh
 15. Rama I Bridge
 16. Menam
 17. Haaba (ハバ)

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18. Pak Nam Railroad
19. Bangkok Noi
20. Thon Buri
21. Tarinchan (タリンチャン)
22. Ban Chimburi (Ban Chimpili)
23. Sala Tham Sop
24. Sala Ya
25. Wat Suwannaram
26. Khlong Maha Sawat
27. Wat Ngu R.1
28. Mahasawat Canal
29. Nakhon Chai Si
30. Tacharaeou (タチャラウ)
31. Tonsamusen (トソサムセン)
32. Nakhon Pathom
33. Pusen Mahooa (プセンマドゥア)
34. Khlong Ban Tan
35. Nong Pla Duk
36. Ban Pong Mai
37. Ban Pong
38. Pootoramu (ポートルム)
39. Chettosamusen (チェットサムセン)
40. Ban Krui
41. Rat Buri
42. Tanomuonsamara Canal (タノムオンサマラ)

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- 43. Banat Songkhram
- 44. Tashichiren Canal (タシチレン)
- 45. Meklong Railroad
33 kilometers
- 46. Maha Chai
- 47. Maha Chai River

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ConfidentialINSERT MAP NO 9MAP OF BANGKOK HARBOR, CITY LIMITS AND LOCATION OF WHARVES

INSERT MAP NO 9: Map of Bangkok Harbor. Location of wharves, and
City Limits

SCALE: $\frac{1}{x}$

A. On The West Bank: From the Southern boundary to Section No. 1

1. Hamburg - Thai Rubber Co.
2. Standard Oil Company
3. Thai Rice Warehouse No. 8
- 3-A Tanyafuta Rice Mill No. 1 (タンヤフタ)
- 3-B Tanyafuta Rice Mill No. 2
- 3-C Tanyafuta Rice Mill No. 1
5. Asia Petroleum Co.
7. Thai Rice Mill No. 3
9. Thai Rice Mill No. 4
11. Ararin and Company warehouse (アラリン)
- 11-B Nannood Pier (ナンノドイ)
- 11-A Siang Hua Long Rice Mill

MAP NO. 9

13. Thai Rice Mill No. 5
15. Thai Rice Mill No. 7
17. Thai Rice Mill No. 10
19. Thai Rice Mill No. 11
 - a. Obelisk
 - b. Dangerous freight anchorage

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- c. Anchorage for small boats
- d. Quarantine anchorage
- e. Prohibited anchorage

On the
East Bank:

- f. Bang Kolan

D. SECTION NO. 1

East Bank:

- 1. Anglo-Thai Pier, and Lumber Mill
- 2. Borneo Warehouse
- g. San Mai

West Bank:

- 21. Thai Rice Mill No. 12
- 23. Thai Rice Mill No. 13
- 25. Wang Lee Rice Mill No. 3
- 27. Wang Lee Rice Mill No. 2
- 29-a. Garit Company Warehouse No.1 (771-)

E. SECTION NO. 2

East Bank

- 8. EAC Pier and Lumber Mill
- 10. Thai Maritime Navigation Company Pier
- 12. United Engineering Company
- 12-a. British-India Pier
- 12-c. Vacuum-Oil Company
- L Lim Heng Chan Rice mill
- 20. K. Tew Warehouse

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MAP NO. 2

22. Chiteito Pier (チイテート)

24. Okura Shoji Warehouse

26. Mitsui Pier

28. Borneo Pier

West bank:

h. Bombay-Burma Lumber Mill

i. Bang Lumpu Lang

D. SECTION NO. 3

West Bank:

33. Thai Salt Company

35. S-C Rice Mill

39-a. Bangkok Chanthaburi Trading

37. Tanyawatana Rice Mill (タンヤワタナ)

39. Thai Rice Mill

j. Borisa Factory (ボリサ)

k. Tachin

East bank:

30. Bangkok Dock Company

32. Wang Lee Pier

34. Thai Rice Mill No. 18

36. Chippukuhon Company (チップクホン)

39-a. Anfuonrao Company (アンフオンラオ)

l. Yan Nava

m. Oriental Hotel

n. Post office

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o. Khlong Banglagon Canal (バタゴン)

p. Prohibited Anchorage

E. Section No. 4 - West Bank:

41. Wang Lee Warehouse

F. North of Section No. 4 - To Warship Anchorage

q. Rama I Bridge (Draw Bridge)

r. Emergency Anchorage

West Bank:

43. Navy Coal Storage

44. Navy Dock

s. Bangkok Yai Canal

t. Naval Academy

u. Wattokurun (ワットクルン)

v. Bangkok Yai

w. Bangkok Noi Station

x. Bangkok-Noi Canal

y. Bangkok-Noi

East Bank:

38. Embarkation dock of royal family

aa. Royal Palace

ab. Museum

G. From Northern Boundary to Warship Anchorage

West Bank:

cc. Bang Phlat

East Bank:

dd. Samsen

ee. Supan wood-shipbuilding yard (スパン)

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40. Harbor Bureau

42. Thai Rice Mill

(11) Onelisk

44. Kwansuuri Mill (クワンスーリ)

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*Confidential*INSERT MAP NO. 10MAP OF PRINCIPAL SHIPPING ROUTE ALONG
THE COAST OF THAILAND AND RAILROAD CONNECTIONS

INSERT MAP NO. 10: Principal Shipping Route along the Coast of Thailand
and Railroad Connections

SCALE: 1:1,000,000

1. Gulf of Thailand
2. Burma
3. Andaman Sea
4. Indo China
5. Khlong Yai
6. Trat
7. Romugoppu (レムゴ" / 7°)
8. Chanthaburi
9. Purasa (フササ)
10. Ko Samet Island
11. Rayong
12. Samesan Island
13. Sattahip
14. Ban Si Racha
15. Chachoengsao
16. Bangkok
17. Ko Si Chang
18. Tachin
19. Meklong
20. Ban Pong

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21. Tavoy
22. To: Moulmein
23. Mergui
24. Prachouap Khiri Khan
25. Chumphon
26. Kraburi
27. Kaofuanji (カオファン)
28. Ranong
29. Lang Suan
30. Ko Tao
31. Penang
32. Ko Samui
33. Ban Don
34. Chaiya
35. Suat Thani
36. Takua Pa
37. Pangnga
38. Taimuan (タムアン)
39. Phuket
40. Krabi
41. Thung Song (Junction)
42. Khao Chum Thong
43. Nakhon Si Thammarat
44. Pak Panang
45. Hoiyotto (ホイヨット)

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- 46. Teang
- 47. Kantang
- 48. Phatthalung
- 49. Ganienku (ガニエンク)
- 50. Satun
- 51. Padang Besar
- 52. Toyai (トヤイ)
- 53. Alor Star
- 54. Sungai Pattani
- 55. Songkhla
- 56. Hat Yai
- 57. Pattani
- 58. Saiburi
- 59. Narathiwat
- 60. Tak Bai
- 61. Tsampa
- 62. To: Singapore

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INSERT MAP NO. 67

MAP OF THAI MILITARY INSTALLATIONS IN THE CITY OF BANGKOK

Legend:

1. Military Works Department
2. Shipyard
3. Infantry unit
4. Cavalry unit
5. Tank unit
6. Antiaircraft unit
7. Artillery unit
8. Transport unit
9. Fuel dump
10. National warehouse
11. Fire station
12. Customs
13. Factory
14. Water reservoir
15. Municipal building
16. Underwater cable
17. Searchlight unit
18. Military hospital
19. Communications unit
20. Ministry of National Defense
21. Naval building
22. Military Officers' school
23. Military Police unit

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24. Police station
25. Hospital
26. School
27. Railroad station
28. Post office
29. Firing range
30. Government office
31. Enemy alien concentration camp
32. Underwater water pipes
33. Temple

Note: There are approximately 20 police stations within the city. Each station has approximately 3 officers, 20 non-commissioned officers, and 40 men. Equipment - 2 or 3 light machine guns, 50 rifles and 35 pistols.

1. To Penang
2. (~~Puamam~~) Rama VI Bridge
3. Southern Line
4. Northern Line
5. Khlong (Purumupurachiyakon*)
6. Khlong (Pappaa*)
7. Highway to Nan Province
- 7A. Bang Su Railroad Station
8. Cement Company
9. Bang Su Police Station

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10. Akaassaiyan* Aircraft Plant
11. (Tefunitto*) St.
12. Rice mill
13. (Bankfuso*) Police Station
14. Cavalry Detachment
15. Rice mill
16. Saphan Keo Road
17. Khlong (Purapaa*)
18. Khlong Mat Noi
19. (Bunrodo*) Brewery
20. Rice mill
21. Irrigation Department
22. Power Plant
23. Bang Phlat Police Station
24. Ping-Teng Paper Manufacturing Company
25. Samsen Police Station
26. Sukho Thai Road
27. (Tosetto*) Police Station
28. Sub-station
29. South Manchurian Railway Office
30. Water Reservoir
31. Army hospital
32. (Jinpao*) Firing Range
33. Khlong Samsen
34. Wachira* Hospital

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35. White Elephant Idols Dist Building. [Usit Palace]
36. (Kaochin) Park [Usit Park]
37. Wat Benchama Boudi
38. Bronze statue
39. Japanese Embassy
40. Japanese Embassy
41. Mitsui Company Building
42. Makasan Railroad Workshops
43. Makasan Railroad Station
44. Railroad to Aranya Prathet
45. Chancery of Japanese Embassy
46. Petchaburi Market
47. Japanese Ambassador's Residence
48. Japanese Minister's Residence
49. Post and Cable School
50. Municipal Public Works Bureau Plant
51. Golf course
52. Race track
53. Asahi Newspaper Co.
54. Japan - Thailand Liaison Office
55. (Misakagun*) Military Police Station
56. Ministry of Education
57. General Headquarters
58. Rajadamnoen Police Station
59. Intelligence Bureau

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60. Wat Snake and Golden Mount
61. Customs
62. Waterworks
63. Sata Trading Co.
64. Hainan company
65. Department of Public Health
66. Department of Communications
67. School of Engineering
68. National Stadium
69. District Government
70. (Farasukusaa*) Physical Culture School
71. School of Architecture
72. University
73. Tu-She Hospital (TN: Tu-she equals poisonous snake)
74. Athletic Club and Race track
75. Water Works sub-station
76. Red Cross Hospital
77. Police School
78. Office of Japanese Military Attache
79. [Japanese] Consulate
80. Mitsubishi Company residence
81. Italian Legation
82. Tropical Diseases Research Laboratory
83. Lumpini Park
84. Mitsubishi Company residence
85. Sala Daeng Police Station

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- 86. Naval Wireless Station
- 87. Office of Japanese Naval Attache
- 88. British Legation
- 89. Girls' school
- 90. Railway Department Buildings
- 91. Highway to Paknam
- 92. Sala Daeng - Pak Nam Electric Railway
- 93. Mitsui Bussan Company Ltd
- 94. Dutch Legation
- 95. Japanese Embassy
- 96. Japanese Grammar School
- 97. Japanese Club
- 98. Municipal District office
- 99. School of Agriculture
- 100. /Siam/ Commercial Bank
- 101. Hongkong-Shanghai Bank
- 102. Central Post Office
- 103. French Legation
- 104. Panrakkut Hospital
- 105. Municipal District Office
- 106. Saint Louis Hospital
- 107. Hotel
- 108. Naval Signal Section
- 109. National Defense Department Fuel Factory
- 110. Fuel dump
- 111. Railroad bridge

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- 112. National warehouse
- 113. Customhouse
- 114. Bangkok Dock
- 115. Rice Mill
- 116. Tobacco Company
- 117. Wappiyakai* Police Station
- 118. E.A.C. Company
- 119. Match Factory
- 120. Streetcar Bureau
- 121. Rice Company
- 122. Rice Company
- 123. Samure* Police Station
- 124. Bombay-Burma Lumber Mill
- 125. Railroad station
- 126. Pakuronsan* Police Station
- 127. Banosomutaimto* High School
- 128. Cadastral Survey Office
- 129. Chiyarunohasu* Bridge
- 130. Bangkok Yai* Police Station
- 131. Naval Academy
- 132. Sirirat* Hospital
- 133. Bangkok Noi*
- 134. Railroad station
- 135. Finance Department
- 136. Royal Palace
- 137. Ministry of Agriculture

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- 138. Tamsura* Police Station
- 139. Ban Buac Thon* Railroad Station
- 140. Utsuringeko Police Station
- 141. Mae Nam Chao Phraya

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Attached Chart No. 9 Coastal Navigation Route Boats

- (1) Name
- (2) Port of registration
- (3) Gross Tonnage
- (4) Net tonnage
- (5) Type
 - (a) Passenger
 - (b) Freight
- (7) Navigation route
- (8) Engine, horsepower
- (9) Details of construction

Material	Length	Width	Depth
----------	--------	-------	-------
- (10) Draught
- (11) Year built
- (12) Owner
- (13) Passenger
- (14) Cargo
- (15) Sunk during the East Asia War in the vicinity of
Shonan (TN: Singapore)
- (16) Sunk in Gulf of Siam -- 1941
- (17) Bangkok
- (18) Shonan (Singapore)
- (19) Gulf of Siam coast

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Attached Chart No 10

- (1) Thailand Navigation Company's regular navigation routes
- (2) (Survey of May 1944)
- (3) Designation of navigation routes (number of days required for voyage)
 - (a) Navigation route Bangkok, S. Thailand and Shonan (Singapore) (approx. three weeks)
 - (b) S. Thailand navigation route (five days to one week)
 - (c) Bandon navigation route (approx. 10 days)
 - (d) Ban Don - Pak Nam navigation route (seven to eight days)
 - (e) Chanthaburi navigation route (approx five days)
- (4) Names of boats used
 - (a) Uaraya, Bannara, Sutadelbu
 - (b) Banuranshi
 - (c) Narisu, Chaichienka, Patana
 - (d) Ban Don, Pak Nam
 - (e) Nitsupa, Puradoshin
- (5) Number of trips
 - (a) One per week
 - (b) One every three weeks
 - (c) One or two per week
 - (d) Two per week

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(c) Date of departure from Bangkok

- (a) Every Saturday
- (b) Alternate Wednesdays and Saturdays
- (c) Alternate Wednesdays and Saturdays
- (d) Alternate Mondays and Thursdays
Alternate Wednesdays and Saturdays
- (e) Alternate Tuesdays, Wednesdays and Saturdays

(7) Ports of call

- (a) Nakhon Si Thammarat, Ban Don, Songkhla, Pattani,
Sai Buri, Narathwat, Tak Bai, Singapore
- (b) Banden, Songkhla, Pattani, Sai Buri, Narathinat, Tak Bai
- (c) Chumphon, Lang Suan, Ban Don
- (d) Rakku Island, Chumphon, Ko Samui, Pak Nam, Ranong
- (e) Battahip, Samesan Waterway, Rayong, Ko Somet,
Fuansa, Chathaburi, Ban Laem Ngop, Trat, Ko Si
Chang, Island

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 FREIGHT TRANSPORT CAPACITY

Chart
No 23

1943 Research

Trains		Mixed		Freight		Total	
Between:		To:	From:	To:	From:	To:	From:
North Line	Bangkok & Ban Phachi	195	195	202	202	477	477
	Ban Phachi & Pak Nam Pho	156	156	141	141	297	297
	Pak Nam Pho & Uttaradit	39	39	47	47	86	86
	Uttaradit & Lampang	8	5	16	13	24	18
	Lampang & Chiangmai	4	2	11	10	15	13
North-East Line	Ban Phachi & Kaeng Khoi	92	92	108	108	200	200
	Kaeng Khoi & Pak Chong	0	5	32	26	40	31
	Pak Chong & Korat	25	25	66	66	91	91
	Korat & Udon Thani	25	25			25	25
	Korat & Ubon	54	54	35	35	89	89
East Line	Bangkok & Krabin Buri	92	92	110	110	202	202
	Krabin Buri & Svai Dan Keo	33	33	82	82	115	115
South Line	Bangkok & Hua Hin	184	184	162	162	346	346
	Hua Hin & Chumphon	19	19	99	99	118	118
	Chumphon & Thung Song	58	58	111	111	169	169
	Thung Song & Khao Chum Thong	34	34	75	75	109	109

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South Line Cont'd

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Hat Yai & Padang Besar	58	58	74	74	132	132
Hat Yai & Sungei Gelok	28	28			28	28
Khao Chun Thong Hat Yai	54	70	105	123	159	193

Remarks:

- The freight transport capacity is expressed in number of cars (the conversion factor is 10 metric tons).
- Mixed trains are passenger trains and express trains
- Freight trains do not include express trains.

[The operation given as to period on which figures are based]

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Chart 30 (part 1)

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A CHART SHOWING THE IMPORTANT POINTS ALONG THE THAILAND RAILWAY WHICH MUST BE SECURED THROUGH OCCUPATION

BANGKOK SURROUNDINGS

Place	Rolling Stock	Repair Installations	Water Supply Provisions	Bridge (Tunnel)	Communication Equipment	Control Unit	Materials	Turning Equipment	Remarks
Bang Su Station	Station locomotives & freight cars	Round-house	Water storage tank & pump			Operation division	Wood fuel		Performs switching for Northern & Southern Lines, and acts as a general freight yard.
Makasan Station		Work shops			Control equipment		Repair materials		
Bangkok Station	Station locomotives & freight cars	Round-house			Control equipment	Maintenance, operation & transportation division	Supply warehouse located within railway station buildings		
Bangkok Noi Station	Station locomotives & freight cars	Round-house	Water storage tank & pump		Control equipment	Operation and transportation division	Wood Fuel	Turn tables 2	
Khlong Chang Station					Control equipment				This is the junction station for Bangkok & Bangkok Noi

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(Continued)

Mae Nam
Station

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There is
operation-
al petro-
leum in
the Nation-
al Defense
Dept. fuel
refineryPama VI
Bridge
(13)Truss
444m
78+64+
120+64+
78Bridge
Near Km 19Truss
70(1370)SOUTHERN LINE Bridges exceeding 50 meters in diameter and 100 meters in length on the Southern Line
are listed here.Bangkok-Noi
Bridge
Near Km 49
from Bangkok
NoiTruss
50(1350)Bridge
Near Km 49Truss
122(21+
80+21)Nakhon
Chaisi
BridgeControl
equipmentBridge
Nakhon
PathomControl
equipment

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(Continued)					Confidential				1330
Khlong Bang Tan Station			Water storage tank & pump						
Nong Fla Duk Station								Acts as a connecting station between Thailand & Burma Lines	
Ban Pong Station					Control equipment				
Bridge Near km 115				Truss (50+ 0.5+ 50)					
Rat Buri Station			Water storage tank & pump		Control equipment			Turn - Tables	
Phet Buri Station			Water storage tank & pump		Control equipment	Maintenance & transportation division		Turn - Tables	
Hua Hin Station					Control equipment				
Bridge Near Km 247				Truss 75(1X75)					
San Boeng Station	Station locomotives	Round house	Water storage tank & pump		Control equipment		Food fuel	Turn - Tables	

(Continued)					CONFIDENTIAL				1380
Bridge Near Km 250				Truss 60 (1x60)					
Bridge Near Km 254				Truss 100 (4x25)					
Bridge Near Km 267				Truss 130 (2x25)					
Kan Kradao Station			Water stor- age tank pump						
Bridge Near Km 312				Truss 70 (1x70)					
Prachuap Khiri Khan Station					Control equipment				
Bridge Near Km 336				Truss 50 (1x50)					
Bridge Near Km 372				Truss 60 (1x60)					
Bridge Near Km 375				Truss 100 (4x25)					
Banchibanyai Station			Water storage tank & pump		Control equipment				
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Chart 30 (part 2)

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Region - SOUTHERN LINE - Continued

Important Installations

Place	Rolling Stock	Repair Installations	Water Supply Provisions	Bridge (Tunnel)	Communication Equipment	Control Unit	Materials	Turning Equipment	Remarks
Bridge Near Km 393				Truss 70(1x70)					
Bridge Near Km 393				Truss 50(1x50)					
Bridge Near Km 412				Truss 60(1x60)					
Pathiu Station			Water storage tank & pump						
Chumphon Station	Station locomotives	Round-house	Water storage tank & pump		Control equipment	Transportation division	Good fuel	Turn-tables	
Bridge Near Km 515				Truss 60(1x60)					
Bridge Near Km 533				Truss 70(1x70)					
Bridge Near Km 548				Truss 135 (65+70)					

(Continued) (Part 2)

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Lang Suan Station			Water storage tank & pump	Control equipment		Food fuel	
Bridge Near Km 567			Truss 100(2x50)				
Khanthuli Station				Control equipment			
Bridge Near Km 583			Truss 60(1x60)				
Bridge Near Km 591			Truss 65(1x65)				
Nondafutai Station			Water storage tank & pump			Food fuel	
Bridge Near Km 629			Truss 60(1x60)				
Bridge Near Km 649			Truss 200(10+50+60)				
Surat Phani Station			Water storage tank & pump	Control equipment		Sawmill	
Ban Song Station			Water storage tank & equipment	Control equipment		Food fuel	

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Continued (Part 2)

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Bridge Near Km 737			Truss 150(3x50)					
Bridge Near Km 739			Truss 70(1x70)					
Bridge Near Km 944			Truss 100(2x50)					
Thung Song Station	Station locomotives & freight cars	Round- house	Water short- age tank and pump	Control equipment	Mainten- ance, op- eration & transport section	Wood fuel	Turn tables	
Bridge Near Km 785			Length 236					
Khao Chum Thong Station	Station locomotives & freight cars		Water short- age tank & pump					
Bridge Near Km 822			Truss 80(1x60)					
Phattha- lung Station			Water short- age tank & pump	Control equipment				
Han Tha Station				Control equipment				

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Continued

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Bridge Near Km 940				Truss 60(1x50)	Confidential				
Bridge Near Km 942				Plate girder 132(11x12)					
Hat Yai Station	Station locomotives & freight cars	Round- house	Water storage tank & pump		Control equipment	Mainten- ance, op- eration & transport section	Good fuel	Turn- tables	
Bridge Near Km 946				Truss 60(1x50)					
Bridge Near Km 961				Truss 50(1x50)					
Bridge Near Km 970				Truss 60(1x50)					
Padang Besar Station		Round- house	Water storage tank & pump						

EASTERN LINE

Eastern Line bridges with lengths of about 50 meters and over are listed here.

Buatake Station			Water storage tank & pump		Control equipment		Tracks		
Chachoengsao Station					Control equipment		Tracks		

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Bridge Near Km 79				Truss 50(1X60)					
Bridge Near Km 83				Truss 50(1X50)					

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Chart 30 (Continued)
 Region Eastern Line - Continued

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Place	Rolling Stock	Repair Installations	Water Supply Provision	Bridge (tunnel)	Communication Equipment	Control Unit	Materials	Turning Equip.	Remarks
Yothaka Station			Water storage tank & pump		Control Equipment		Wood-fuel		
Bridge Near Km 100				Truss 50 (1x50)					
Prachin Buri Station					Control Equip	maintenance & transport div.			
Bridge Near Km 136				Truss 100 (2x30 + 1x40)					
Bridge Near Km 161				Truss 120 (2x20 + 50x30)					
Krabinburi Station		Round-house	Water storage tank & pump		Control Equip			Turn- tables	
Ban Kaeng Station			Water storage tank & pump						
Sa Kaeo Station					Control Equip.				

Aranprathet Station	Round House	Water storage tank & pump	Confidential Control equip.	Wood- fuel	Turn - tables	1330
Bridge near Km 302			(Constr- ction) Wood 140			
Bridge Near Km 311			Truss 54(2X12+ 30)			
Mongkol Borey Station		Water storage tank & pump		Wood- fuel		
Battambang Station	Round house	Water storage tank & pump	Control equip.	Oper- ations div.	Wood- fuel	turning eye
Bridge Near Km 375			Truss 100 (5X10)			
Runonpakot Station		Water storage tank & pump				
Bridge Near Km 423			Truss 78'35+17 2X13)			
Bridge Near Km 447			Truss 61(10+ 3X17)			
Donkeo Station		Water storage tank & pump	35			

CAMBODIAN LINE

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All the bridges on Cambodian Line, with lengths 50 meters and over are enumerated here.

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Pursat Station	Station locomotives & freight cars	Round house	Water storage tank & pump		Control equip	Transportation & Maintenance div.	Dispersed material	Turning wye	
Bridge Near Km 164				Truss 105.6 (3x352)					
Bridge Near Km 125				Truss 52.8 (3x17.6)					
Damonata (Domnak) Station			Water storage tank & pump		Control Equip.				
Bridge Near Km 111				Truss 52.8 (2x26.4)					
Zottaara-romea * Station			Water storage tank & pump		Control equip.				
Bridge Near Km 75				58.3 plate girder + Truss + Plate girder					
Tsubenko-posu* Station			Water storage tank & Pump		Control equip.				

Bridge Near Km 46				Truss 70(2X35)	Control Equip.	Trans- portation mainte- nance div.	Supply store- house & mainte- nance material	Turning eye	
Phnom- Penh Station	Station locomotives & freight cars	Round- house & factory annex	Water storage tank & pump						
NORTHERN LINE									
All the bridges on the Northern Line, with lengths 50 meters and over are enumerated here.									
Bridge Near Km 7				Truss 60(2X30)					
Khlong Rang Sit Station			Water storage tank & pump		Control Equip.				
Chiang Rak No 1 Station					Control equipment				
Bridge Near Km 38				Plate girder 63(6X8+ 2X75)					
Bridge Near Km 57				Plate girder 95(31+33+ 31)					
Bridge Near Km 62				Plate girder 10(32+32+ 32)					

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Ayutthaya Station			Water storage tank & pump	Control Equip				
Bridge Near Km 73				Plate girder truss 104(4x12 56)				
Bridge Near Km 77				Plate girder 60(5x12)				
Bridge Near Km 81				Plate girder (72(6x12)				
Bridge Near Km 85				Plate girder (72(6x12)				
San Phachi Station		Round house	Water storage tank & pump	Control equip		Wood-fuel	Turn - tables	
Bridge Near Km 102				Truss 103 (2x 24-5x54)				
Lop Buri Station			Water storage tank & Pump	Control Equip.				
Chong Khae Station			Water storage tank & pump	Control equip.		Wood fuel quarry		

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Bridge Near Km 250				Truss 54(1X54)	Control equip.	Mainte- nance operation & trans- portation div.	wood fuel saw- mill	Turn - tables	
Paknam Pho Station	Station locomo- tives & freight cars	Round- house	Water storage tank & pump						
Bridge Near Km 299				Plate girder 90(10X9)					
Bridge Near Km 309				Truss (50(2X25))					
Taphan Station			Water storage tank & pump		Control equip.				
Bridge Near Km 332				Truss 90(2X24 40)					
Bridge Near Km 355				Truss (81(1X81))					
Bridge Near Km 366				Truss (50(1X50))					
Pitsanulok Station	Station locomo- tives, freight cars	Round- house	Water storage tank & pump		Control equip.		wood fuel	Turn tables	

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Bridge Near Km 513				Length 120m					10 1330
Bridge Near Km 515				Length 150 m					
Den Chai Station			Water storage tank & pump		Control equip.		wood fuel		
Ban Pin Station			Water storage tank & pump		Control equip.		wood fuel		
Mae Chang Station			Water storage tank & pump		Control equip.				
Lampang Station	Station locomotives & freight cars	Round- house	Water storage tank & pump		Control equipment	Mainte- nance operation div.	wood fuel	Turn tables	
Bridge Near Km 613				Truss 150(5X30)					
Bridge Near Km 680				Truss 185					
Bridge Near Km 680				Truss 151					

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Bridge Near Km 680				Truss 105			
Bridge Near Km 682				Length 563 m			
Tha Chompa Thampon Station			Water storage tank & pump		Control equip.		
Bridge Near Km 716				Truss 50			
Bridge Near Km 725				Truss 50			
Chiangmai Station	Station locomotives & freight cars	Round- house	Water storage tank & pump		Control Equipment	Wood fuel	Townships

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1. Map No. 2
2. Topographical Map, cultivated and uncultivated areas.
3. Scale: 1:2,700,000
4. (a) Kilometers (b) Miles
5. Legend:

- | | | |
|-----|---|----------------------|
| (a) |  | Paddy field |
| (b) |  | Teak forest |
| (c) |  | Sparsely-wooded area |
| (d) |  | Jungle |

6. General Conditions:

Out of 516,340 sq. km., the total area of Thailand, 77% (500,820 sq. km.) is forest, of which about 10% is valuable forest with growth of teak and aromatic woods.

The cultivated area at the present is 5% (35,677 sq. km) of total area. There are still many areas which can be cultivated. The rice growing area is 34,630 sq. km. The area devoted to agricultural products is ~~30%~~ 30% (1,039 sq km) of the rice area.

7. Republic of China
8. Burma
9. French Indo-China
10. Cambodia
11. Gulf of Siam
12. Andaman Sea
13. Malaya

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1. Map No. 5

2. Map shows Landing points together with harbors and bays and rivers that can be utilized for landing in Thailand.

3. Note:

The speed of flow and depth of the ~~Mekong~~ Mekong River differs in the rainy and dry seasons, but the river is generally shallow and has hidden rocks here and there. Even small motor boats with shallow drafts have to select a route for navigation. This river has a little value for military use, but the various river crossing points, such as Nakhon Phanom, Mukdahan, and Khon, are of great importance for military operations and supplies from the direction of French Indochina.

4. The rivers in Shan Province are very winding and have rapid current so that they have very little military value. At various places during the dry season, it is possible to ford the rivers.

5. The banks of Mekong River, in the vicinity of Nong Khai, ^{21'} ~~10'~~ comparatively not very steep so that it is possible to climb^b up to the bank from various places.

6. The Mae Nam from the vicinity of Bangkok to the north, has a great value as a route for military operation against Thailand.

7. The Mae Klong River, because of its rapid current, has very little value as a route for military operations.

8. As the Nam Chi and Mae Nam Mun ^{and} greatly affected by the changes of dry and rainy seasons, they have very little value as mediums of transportation.

9. In the neighborhood of Savannakhet, the Mekong River has steep banks which rise from five to ten meters and on the banks there are many thorny plants. ~~The~~ native canoes are tied here and there along the banks. Only foot soldiers can scale the bank.

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10. Road to Huong Hoa*
11. Width of River - 150-300 meters; Rate of flow - 50 centimeters.
12. For military operations against Bangkok, Samut Sakhon, Pak Nam, Bang Pakong, Chachoengsao are suitable for landing of small unit.
The waterways in the neighborhood of Bangkok can be utilized as a route for military operation of powerful units with both large and small ships.
13. Sawankhalok
14. Nakhon Sawan
15. Mukdahan
16. Chachoengsao
17. Pak Nam
18. Bangkok
19. Sea plane base
20. Findings: Kra Buri-Ranong Waterway [sic] is suitable for transferring of motor boats from the east coast to the west coast, and the Victoria Bay is a suitable temporary anchorage for lighter vessels. Landing of a powerful unit is also possible along Victoria Point.
- 20a. Kra Buri
21. Victoria Point
22. The shore in the neighborhood of Sataphi is suitable for landing of powerful units.
23. The northern shores of Si Racha are suitable for landing of large units.
24. Rayong is a suitable place for landing of small unit.
25. The shore in the neighborhood of Prachuap Khiri Khan is suitable for landing of powerful unit.

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26. The coast of Chumphon is suitable for landing of small unit. From here the troops can easily advance toward the vicinity of the Kula River and toward the Burma frontier.
27. Seaplane base
28. Bandon (Surat Thani) is suitable for landing of small unit. But there are very few roads that can be utilized after the landing. The road which is under construction at the present will be completed around November.
- 28a. Bandon
29. Although the vicinity of the Phuket Islands is suitable base for ships and light war vessels, the condition of the coast is not very good. Communication between Phuket and the west coast of Malaya is difficult. Various places along the coast are suitable for landing of a small unit.
30. CHATOPACHA*
31. The installations of Kantang Harbor are insufficient and moreover, the communication, from the ^{entrance of} harbor to the open sea ^{to the coast} is very inconvenient, but the harbor has military value because of the presence of a railroad at its rear.
32. Kantang
33. RAWAI*
34. Satun harbor is a suitable supply base and base for military operations of one unit.
35. Satun
36. The Tha Sala coast is suitable for landing of large units.
37. Tha Sala
38. The eastern coast of Pak Phanang and the Tha Sala and Nakhon

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Si Thammarat harbors are suitable for landing small units.

39. Nakhon Si Thammarat

40. Pak Phanang

41. Seaplane base

42. Songkhla is suitable for landing of large unit.

43. Songkhla

44. Pattani is suitable for landing of small unit.

45. Pattani

46. Small craft are able to navigate the Thepa River up to Thepa town. Thepa is suitable for landing of small units.

47. Thepa

48. Panare is suitable for landing of large units.

49. Panare

50. Small craft can navigate up the Saiburi River to Saiburi town. Saiburi is suitable for landing of small unit.

51. Saiburi

52. Narathiwat is suitable for landing of small units.

53. Narathiwat

54. Kota Bharu is suitable for landing of large unit.

55. Kota Bharu

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1. Map No. 6
2. Map of roads in Thailand
3. Up to December, 1944
4. Scale: 1:2,000,000
5. Legend:
 - a. Automobile road
 - b. Projected roads,
At present used as packs trails
 - c. Roads under construction
 - d. Horse and pack mule trail
 - e. Ox cart trail
 - f. Good all weather road
 - g. Good road during dry season but impassable in rainy season
 - h. Figure corresponds to the number on the photo taken
6. Hsipaw
7. Manri
8. Automobile traffic possible during rainy season
9. Loilem
10. Taunggyi
11. Road to Thazi
12. 66 Kilometers long - width of road equals 4-5 meters.
Asphalt surfaced road. Possible for cars to travel during rainy season.
13. Major invasion route for military operations.

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14. Length = 104 kilometers. Width = 4-5 meters. The mountain road is paved with asphalt. The road along flat terrain is of dirt construction. It will be rather muddy in rainy season and will be hard to travel by car.

15. There is no bridge but you can cross the river by pontoon raft and log canoes. It is difficult to cross the river in the rainy season.

16. TAKAU*

17. The Lampang Mesai - Taunggyi Road are suitable for military operations toward Burma area.

18. Monghpayak

19. Mong Yang

20. Distance - approximately 110 kilometers. During rainy season, the road gets extremely muddy but with difficulty, cars can pass.

21. Mongma

22. Mongkai

23. Ken, Lapo

24. Wooden bridge. Automobile can pass. Length - 8 meters. Width - 4 meters.

25. Kengtung

26. Approximately 70 kilometers. During the rainy season vehicular travel is impossible. The river can be forded by elephants and on foot only.

27. Roads become muddy and are washed away in many places during rainy season and travel becomes difficult.

28. Wooden bridge. Can be crossed by a car. Passengers have to get out of car. Length 20 meters. Width - 4 meters.

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29. Length is 140 kilometers. Width of road is 4-5 meters. Road is constructed of red soil and gravel. Travel is rather difficult during rainy season.
30. Danger of vehicle overturning.
31. Length of road is 135 kilometers. Road width is five to six meters. Gravel surface. Travel by car is difficult during rainy season.
32. Road width is five to eight meters. Road is gravel. Travel by car is not difficult even in the rainy season.
33. 31 kilometers long. Width is eight meters. Macadamized road. A good road for vehicles.
34. The road between Chiangmai, Mae Hong Son and Tongu is now under construction but after its completion it will be a suitable route for military operations against Burma area.
35. Length of road is 61 kilometers. Width of road is five to eight meters. Good road for vehicle.
- 36a. Width is six meters. Difficult to travel during rainy season.
- 36b. Via Phu Dien and PUJIENSHO* to Hanoi.
37. Width is six meters. Automobile can pass during dry season.
38. Width is eight to ten meters. Macadamized road. Good automobile road.
39. Width is six to eight meters. Good automobile road.
40. Width is eight to 12 meters. Road gets muddy.
41. Important route for military operations.
42. Road gets muddy during rainy seasons and travel by car is impossible. Travel by vehicle is possible during dry season.
43. Burma

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- 44. Travel is difficult during rainy season. Several places have incline of 1/3 and 1/6.
- 45. Travel is difficult during rainy season.
- 46. Good road for vehicles.
- 47. Chiangmai.
- 48. Cars can pass during dry season.
- 49. Road width is three to four meters. No pavement. Vehicles can pass during dry season.
- 50. Road width is six to eight meters. Vehicles can pass during dry season.
- 51. Road width is four meters. Asphalt and gravel surfaces. Good road.
- 52. Width is eight meters. (Good asphalt road.)
- 53. Width is eight meters. Good road.
- 54. Steel bridge. Length is 50 meters. Width is eight meters.
- 55. Travel is difficult during rainy season.
- 56. Vehicles can pass during dry season.
- 57. Good road
- 58. Major route for military operations.
- 59. Width is seven meters. Good road for vehicle.
- 60. Width is eight meters. Good road for vehicle.
- 61. Red soil and gravel road. Good road. Both sides of road are forest land. No difficulty in the movement of troops on foot.
- 62. Width is six to eight meters.
- 63. Width is eight meters. Good red-soil road. Being newly constructed there are many places which cause difficulty in travelling during rainy season.

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64. Width is eight meters. Good red-soil road. There is a wagon trail along road side.
65. The road side ^{passing through road but through} is practically (or mainly) jungle area and undulating land, except in the vicinity of Sakon Nakon.
66. Width is eight meters. Good road - red-soil surface.
67. Road side ~~is~~ ^{is} jungle area. ^{Good} Width is eight meters. Red soil surface. Good road.
68. French Indo-China.
69. Route for military operations.
70. Jungle and undulating area. Width is eight meters. Good red-soil road.
71. Jungle. Difficult for soldiers to pass through.
72. 77 kilometers long. Width is six to ten meters. Macadamized road.
- 73a. Ubon
- 73b. Paddy field.
74. Wagon road.
75. 61 kilometers long. Width is four meters. Gravel surfaced road. Good condition.
76. Width is seven meters. Red-soil surface. Good road for vehicles.
77. Width is seven meters. Asphalt surface. Some areas will be flooded during rainy seasons.
78. Width is four to five meters. Vehicles can pass during dry season. It turns muddy in some areas and bridges ^{are} will be frequently washed away and destroyed. Travel by car is impossible.

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79. Good road. Various sections ^{will} be flooded during rainy season.
80. Width of road is eight meters. Simple paved road.
81. Width is ten to 15 meters. Most part of road built of gravel.
Good road. Creeks and paddy fields on both sides of road.
82. Width is ten to 12 meters. Good road with gravel surface. The road side has paddy fields and dense woods.
83. Width is ten to 15 meters. Red soil, gravel road. Good road.
84. Width is ten to 15 meters. Good road. Red soil and gravel surface.
85. Major route for military operations.
86. Width is ten to 15 meters. Good road-gravel surface.
87. Width is ten to 15 meters. Asphalt surface. Good road.
88. Aside from road, troop movement is difficult.
89. Width is six to five meters. One section is asphalt, the rest is built of red soil and gravel. Travel during rainy season is difficult.
90. Width is five meters. Red ~~dirt~~ and gravel road.
91. Width is five meters. Asphalt surfaced road. Good road.
92. Width is five meters. Gravel and red ^{soil} ~~dirt~~ road. Travel during rainy season is rather difficult.
93. Asphalt road. Width is seven to 15 meters. Good road.
94. Width is five meters. Red ^{soil} ~~dirt~~ and gravel road. Good road.
95. The Rayong - Bangkok Road and the Rayong-Chachoengsao Road are suitable for large scale military operations toward Bangkok and Lopburi.
96. Gulf of Siam
97. The Songkhla - Sadao - Penang Road and the Pattani - Setong - Penang Road are suitable for large scale military operations against Malaya.

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- 98. Width is five to six meters. Red dirt road. Vehicles can pass through during dry season.
- 99. Width is three meters. Gravel road. Vehicles can pass through during dry season.
- 100. The Chumphon - Kpa Juri Road is suitable for large scale military operation.
- 101. Width is four to five meters. Macadamized road. Good road.
- 102. It is difficult for horses and men to pass through this road during rainy seasons.
- 103. Width is five meters. Vehicles can pass during dry season.
- 104. Width is five meters. Asphalt and gravel road. It is a good road.
- 105. Width is five meters. Road turns muddy during rainy season and automobile travel is impossible.
- 106. Width is five meters. Clay mountainous road. Automobile can travel only during dry season.
- 107. Width is three to six meters. Gravel road. One section is paved with asphalt. Good road.
- 108. Width is six meters. Gravel road. Level and good road.
- 109. Width is four to six meters. Red-dirt and gravel road. Good road.
- 110. Width is four to six meters. Gravel road.
- 111. Width is five meters. Asphalt road. Good road.
- 112. There are many places where it will get muddy during the rainy season.
- 113. Width is four to six meters. Mostly gravel construction. Good road.

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114. According to the agreement between Japan and Thailand, the railroad will be removed and a new road will be constructed in its place.
115. The Phompenh-Aran¹¹prathet - Bangkok Road is suitable for large scale military operations.

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1. Map No 11
2. Railroads of Thailand
3. Legend
 - a Main Railroad stations
 - b Rail division (Figure indicates the number of the line involved)
 - c Engine shed (Figure indicates the number of the line)
 - d Water supply installation (Figures indicate capacity of tanks)
 - e Turn table (Figure indicates the length of turntable)
 - f Railway maintenance crew (section men)
 - g Bridge
 - h Figures at the end of lines show the length of important bridges and mark intervals of 50 kilometers from the cardinal point.
 - i Slopes are shown in scale of 1:1000
 - j Single track line
 - k Double track line
 - l Street Car track
 - h. Bangkok is the cardinal point from which the distances are measured in kilometers, but for the railroads in the southern section, Bangkok Noi is used as the base. Fifteen kilometers must be added if Bangkok is to be used as cardinal point.
 5. The bridges between these points span gorges and if they were damaged, it would require a great many days to have them repaired.
 6. Embankments are plentiful in open area and great care against water damage must be taken.
 7. Tunnel
 8. Bangkok

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9. Tunnel

10. Western Malaya Line.
11. Railroad to Kuala Krai
12. French Indo-China
13. Andaman Sea
14. Gulf of Siam

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Map No 13

General Map of Thailand's Water Transportation

1. Scale 1:2,700,000

(a) Kilometer

(b) Mile

2. Legend

a. Figures indicate tonnage of craft by which navigable. The indicated point is the farthest navigable ~~for~~^{for} craft of tonnage indicated during dry season. Much larger craft than indicated are able to navigate up-stream during the rainy season.

b. Figures indicate the overall length of the rivers.

c. Naval base

d. Open port

e. Harbor

3. The current of the rivers and streams of Shan province is generally swift. Furthermore, there are many ~~bands~~^{bars} making navigation difficult. During the dry season it is possible to ford at many points, but during the rainy season it is impossible.

4. The speed of flow during the dry season is approximately ~~four~~⁴ meters. Bridges and native canoes are the method used for crossing this river which is 200 meters wide, but it is difficult during the rainy season.

5. (a) Dry season - Width - 60 meters; depth - 1 meter;

Speed of flow - 1 meter.

(b) Rainy season - Depth - 4 to 6 meters; flow - very swift

6. Dry Season - Width - 150 meters; depth - 2 meters;

flow - 1 meter

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7. Depth - 1 meter; width - 20 to 30 meters.
8. Width - 100 meters; depth - 1.8 meters.
9. Width - 300 meters; flow - average - 1 meter.
10. Motor and row boats can come up to this vicinity. Only canoes can go upstream from here. It is dangerous because of many rapids.
11. Although the volume of water is great, canoes and canoes with outboard motors must be used for travelling. Transportation of supplies to areas in the upper reaches is entirely dependent on this river. The rivers banks are steep and are lined with a thick growth of trees.
12. Width - 50 meters. Speed of flow - 3 meters. Boats must be pulled upstream.
13. Water begins to increase in May and reaches its peak in August. Low water period is November. High water ^{mark} is 20 meters. ~~Boats with~~
~~4-ton pirogues~~ ^{on regular schedule} can navigate. In the high water period, danger to navigation increases but it creates no serious obstacles in upstream traffic.
14. Numerous bends and rapids.
15. In the rainy season, one can sail to the upper reaches of the stream.
16. ~~The~~ cargo boat, can go up the river.
17. A launch with one meter draft can navigate 500 kilometers upstream.
18. The width of the river is 1,200 meters. In the rainy season, the depth of the water is about 10-15 meters. The speed of flow is 0.7 meter. The depth of the water in the dry season is 6-10 meters. There is one pier which can be used for landing and clearing of a ~~transport~~
 (30-ton motor boat) ^{which runs} between Savannakhet ^{and} Vientiane. It is necessary to

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build more piers and entrance ~~lanes~~^{channels} in other places. At present there is only one entrance ~~lane~~^{channel} (it is very hard to build more ~~lanes~~^{channels} due to the terrain). Native boats in the vicinity can be used for river crossing and ponton rafts can be built.

19. Mekong River

This river originates in Tibet and the length of the river is about 4,200 kilometers. This river runs south of the border between ~~French~~ Indo-China and Thailand. Nine big tributaries join the river on its run to the South China Sea. Swift currents and reefs exist in various places. The difference between high and low stages is great (the volume of water at highwater is 30,000 cubic meters, and at low water 1,000 cubic meters). At the present, too much cannot be expected in using this route as a communication artery.

20. The width of the river is 150 - 300 meters. Speed of flow is 50 centimeters.

21. Native boats of one-meter draft ply between these areas all through the year (about 67 boats are available.)

22. Navigation centered around Bangkok has greatly developed. There are numerous canals which connect the big rivers in Thailand. Transportation in the central area is almost entirely by these waterways.

23. The width of ^{the} river is 150 - 180 meters. The depth of ^{the} river is 2 - 6 meters.

24. The width of ^{the} river is 100 - 200 meters. The depth of ^{the} river is 2 - 6 meters.

25. 300 boats of 100-ton class.

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- A small boat provides service.
26. ~~Between Tak and Bangtak, there is a small ferry boat~~
 27. ~~Between Tak and Bangkok, there is a small motor boat (both~~
~~for cargo and passenger).~~ ^{river between Tak and Bangkok} The boat can carry 100-150 passengers.
 28. The width of river is 50-60 meters. The depth of river is 7 - 8 meters.
 29. In the dry season, the rice boats are not able to navigate.
 30. The width of river is 200 meters. The depth of river is 4 - 6 meters.
 31. In the dry season, only small boats can navigate.
 32. The width of river is 100 meters. The depth of river is ten meters.
 33. Mae Nam River

The head of this river is north of Chiangmai, near the Burma border. The river has many tributaries. It flows through the central plains and discharges into the Gulf of Thailand. The tributaries are connected by various canals. The current is very slow so that even at the high water stage there are no destructive floods. The width of the river mouth in the vicinity of Pak Nam is about 800 meters. This river has great value as a transportation artery for military forces and supplies.

34. The available ships at Bangkok are listed appended chart No 6.
35. Navigable by small boats up to 80 kilometers from the river mouth.
36. The width of river is 100 - 200 meters.
37. To Singapore